AMENDMENTS

Kindly amend claims 1-5, 10-15, 23, and 25, and cancel claims 8, 16, 17, 27, and 28.

In the Claims:

Claim 1. (Currently amended) A method for identifying a compound that modulates DAF-18 expression or activity, comprising:

(a) providing a ~~nematode~~ *C. elegans*, isolated ~~nematode~~ *C. elegans* cell, or isolated mammalian cell expressing a ~~nematode~~ *C. elegans daf-18* gene; and

(b) contacting said ~~nematode~~ *C. elegans*, isolated ~~nematode~~ *C. elegans* cell, or isolated mammalian cell with a candidate compound to determine the effect of said candidate compound on *C. elegans daf-18* expression or activity, an alteration in said *C. elegans daf-18* expression or activity following contact of said ~~nematode~~ *C. elegans*, isolated ~~nematode~~ *C. elegans* cell, or isolated mammalian cell with said candidate compound identifying said candidate compound as a modulatory compound.

Claim 2. (Currently amended) A method for identifying a compound that modulates PTEN expression or activity, comprising:

(a) providing a ~~nematode~~ *C. elegans* or isolated ~~nematode~~ *C. elegans* cell comprising a mutation in its endogenous *daf-18* gene;

(b) expressing in said ~~nematode~~ *C. elegans* or isolated ~~nematode~~ *C. elegans* cell a ~~mammalian~~ human PTEN gene; and

(c) contacting said ~~nematode~~ *C. elegans* or isolated ~~nematode~~ *C. elegans* cell with a candidate compound to determine the effect of said candidate compound on human PTEN expression or activity, an alteration in said human PTEN expression or activity following contact with said candidate compound identifying said candidate compound as a modulatory compound.

Claim 3. (Currently amended) The method of claim 1 or 2, wherein said compound increases *C. elegans daf-18* or human PTEN expression or activity and is therefore a candidate compound for increasing longevity of a cell or organism.

Claim 4. (Currently amended) The method of claim 1 or 2, wherein said compound decreases *C. elegans daf-18* or human PTEN expression or activity and is therefore a candidate compound for treating an impaired glucose tolerance condition or obesity.

Claim 5. (Currently amended) The method of claim 1 or 2, wherein said method is carried out in a transgenic ~~nematode~~ *C. elegans*.

Claims 6-9. (Cancelled)

Claim 10. (Currently amended) A method for identifying a compound that is a candidate compound for ameliorating or delaying an impaired glucose tolerance

condition or obesity, comprising contacting a biological sample with a candidate compound and assaying said sample for *C. elegans* DAF-18-mediated lipid phosphatase activity, a decrease in said activity indicating a candidate compound for ameliorating or delaying an impaired glucose tolerance condition or obesity.

Claim 11. (Currently amended) A method for identifying a compound that is a candidate compound for increasing longevity of a cell or organism, comprising contacting a biological sample with a candidate compound and assaying said sample for *C. elegans* DAF-18-mediated lipid phosphatase activity, an increase in said activity indicating a candidate compound for increasing longevity of a cell or organism.

Claim 12. (Currently amended) A method for identifying a compound that is a candidate compound for ameliorating or delaying an impaired glucose tolerance condition or obesity, comprising contacting a biological sample with a candidate compound and assaying said sample for human PTEN-mediated lipid phosphatase activity, a decrease in said activity indicating a candidate compound for ameliorating or delaying an impaired glucose tolerance condition or obesity.

Claim 13. (Currently amended) A method for identifying a compound that is a candidate compound for increasing longevity of a cell or organism, comprising contacting a biological sample with a candidate compound and assaying said sample for

human PTEN-mediated lipid phosphatase activity, an increase in said activity indicating a candidate compound for increasing longevity of a cell or organism.

Claim 14. (Currently amended) The method of claim 10 or 12, wherein said method further comprises assaying said compound in a ~~nematode~~ *C. elegans* or isolated ~~nematode~~ *C. elegans* cell which comprises a mutation in its endogenous *daf-18* gene and which expresses a ~~mammalian~~ human PTEN gene, a decrease in human PTEN activity indicating a candidate compound for treating an impaired glucose tolerance condition or obesity.

Claim 15. (Currently amended) The method of claim 11 or 13, wherein said method further comprises assaying said compound in a ~~nematode~~ *C. elegans* or isolated ~~nematode~~ *C. elegans* cell which comprises a mutation in its endogenous *daf-18* gene and which expresses a ~~mammalian~~ human PTEN gene, an increase in human PTEN activity indicating a candidate compound for increasing longevity of a cell or organism.

Claim 16-22. (Cancelled)

Claim 23. (Currently amended) A transgenic ~~nematode~~ *C. elegans* whose cells contain a transgene encoding a ~~mammalian~~ human PTEN polypeptide.

Claim 24. (Cancelled)

Claim 25. (Currently amended) The transgenic ~~nematode~~ *C. elegans* of claim 23, wherein said ~~nematode~~ *C. elegans* carries a mutation in its endogenous *daf-18* gene.

Claim 26. (Currently amended) The method of claim 5, further comprising the step of testing said identified compound in a diabetic or obesity mouse model system.

Claims 27 and 28. (Cancelled)